

Electrical
 Specification for:

AC/DC HIGH POWER SYSTEM

19"x6U ,70V 12.24KW

TelkoOR Model:

PS-1260



CUSTOMER: GENERAL	SIZE	CAGE CODE	S5417	DWG. NO.	1260-DOC1-10	REV	C3
	SCALE		RELEASE DATE	04/02/2013	SHEET	1	OF 8

REVISION HISTORY					
Rev Level	Rev Date	Change Made	Reason for Change	Effective	Approved By
A	04/02/2013	Specification Release		04/02/2013	S.Sadot
B	25/04/2013	Output change to 75V±5V Change to one connector for in/out Positronic PLC30F1000,	Customer request	25/04/2013	S.Sadot
C	09/09/2013	Change the output voltage 70V	Customer request	09/09/2013	S.Sadot
C1	16/09/2013	Change the current to 180A Max.	Customer request	16/09/2013	S.Sadot
C2	04/11/2013	Change max. power to 12.24KW Max. Load regulation ±0.5%	Reliability Improvement	04/11/2013	S.Sadot
C3	11/11/2013	Updated spec.	Adding missing information	11/11/2013	S.Sadot

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Scope

The PS-1260 high Power System is a 19" power box using internally fans for cooling. It includes 9 models PS-1670 hot plug-able power cassettes in a power share N+1 configuration delivering power of up to 12240W.

The PS-1260 output voltage is 70Vdc.

The PS-1260 with its reliable construction is best suited for use in today's military environment as DC power source.

Input:		
Input Voltage:		380Vac \pm 10.0% line to line 3 phase star connection or 440Vac \pm 10.0% line to line 3 phase delta connection per MIL-STD-1399 (navy) section 300A.
Frequency:		47-63Hz
Soft Start:		Initial Inrush current limit
Power Factor:		0.98 typical at full load
Efficiency		88% and full load
Output Voltages & Currents:		
Output Voltage		70VDC (66 - 74VDC Internally adjustable)
Output Current		180A Max.
Line Regulation: (\pm 10%)		\pm 0.1% Maximum.
Load Regulation: (10-90%)		\pm 0.5% Maximum
Ripple & Noise:		\leq 1% p-p Max @ 20 MHz bandwidth with 1u ceramic and 10 electrolytic on measure point.
Initial Set Point Tolerance:		\pm 1V
Overshoot & Undershoot:		Less than 1% at turn ON-OFF
Transient Load Response:		\pm 6% Max. deviation for load change of 50% to 100%, at slew rate of 1A/usec, recovery time less then 10mSec
Turn On - rise time:		Soft Start,80mSec typical.
Hold-up Time:		5mSec
Switch-On Time		500mSec typical
Temperature coefficient		0.02%/°C typical
Switching Frequency		60KHz
Over-current/Short Circuit Protection		105 to 120% of I Maximum constant current limit,
Over-voltage Protection		Latch Shut down at 115 to 130%.
Temperature Protection		Latch Shut down due to excessive ambient temperature,
Switching Frequency		60Khz
Redundant Operation		Yes, With Decoupling Diode
Parallel Operation		Yes, Current Balancing by Decoupling Diode
No load input power		80W

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Front Panel Indicators & Command		
DC OK		Green LED illuminates for AC OK.
FAILURE		RED LED illuminates for Failure
RESET		Power Supply Reboot – Momentary Switch
Voltage Meter (VOLTS)		Measure Output Voltage (V)
Current Meter (AMPS)		Measure Output Current (I)
Output Current Sense		10Mv/1A ± 10%
Environmental Specifications:		
Temperature:		Operating: -20°C to +75°C , 2.5%/°C load de-rating from 55°C
Storage:		-40°C to +85°C
Cooling:		By internal fans, Variable speed control.
Humidity:		10 to 90% RH non-condensation.
Altitude:		Operating 10,000 ft. Non- operating 40,000 ft.
Vibration and Shock		Meet ETS 300 019
Safety Regulatory & EMC Specifications (Designed to meet):		
MEETS FCC CLASS A, CISPR 22 CLASS A, EN55022 CLASS A		
EN61000-3-2		HARMONICS
EN61000-3-3		VOLTAGE FLUCTUATION
EN6000-4-2		ESD +8KV AIR +4KV CONTACT DISCHARGE, performance criteria B
EN61000-4-3		RADIATED IMMUNITY: 80-1000Mhz 3V/m, AM 80% (1KHz), criteria A
EN61000-4-4		FAST TRANSIENT: 1KV for AC power port, 0.5KV for DC power I/O and signals Port, performance criteria B
EN61000-4-5		SURGE: 2KV common mode and 1KV differential mode
EN61000-4-6		3VRMS, 80% A.M. BY 1kHz
EN61000-4-8		3A /m at 50Hz, performance criteria A.
EN61000-11		VOLTAGE Dips and interruption: 30% reduction for 10mSec –Criteria B, 60% For 100mSec. Criteria C, 95% reduction for 5000mSec Criteria C.
Input to Case		3500VDC
Input to Output		3500VDC
Output to Case		500VDC
Insulation resistance		>10Mhm at 500Vdc
Safety		Acc. to EN60950 Class 1
Cepage/Clearance		Acc. to VDE 0110 ≥ 4mm
Air distance		Acc. to VDE 0110 ≥ 3mm
MTBF:		100,000 hours minimum per BELCOR 332, issue 6 specification @ 30°C

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Mechanical Dimensions		
Size (LXWXH)		19" x 6U x 460mm, including the in/out connector
Weight		40Kg Max.
Input /Output Connector		Positronic PLC30M10140/AA + MC112N-14
Mating Connector		Positronic PLC30F1000/AA + FC112N2/AA

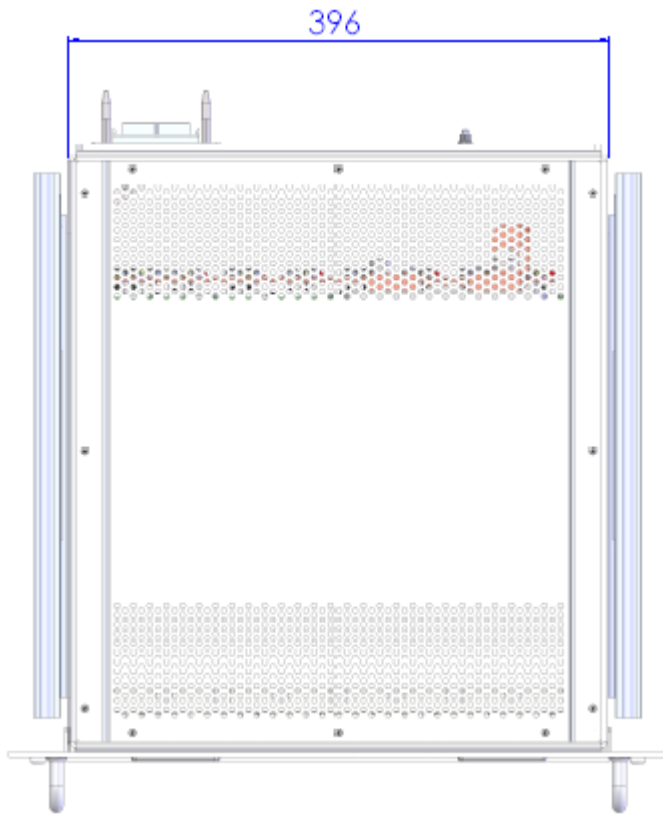
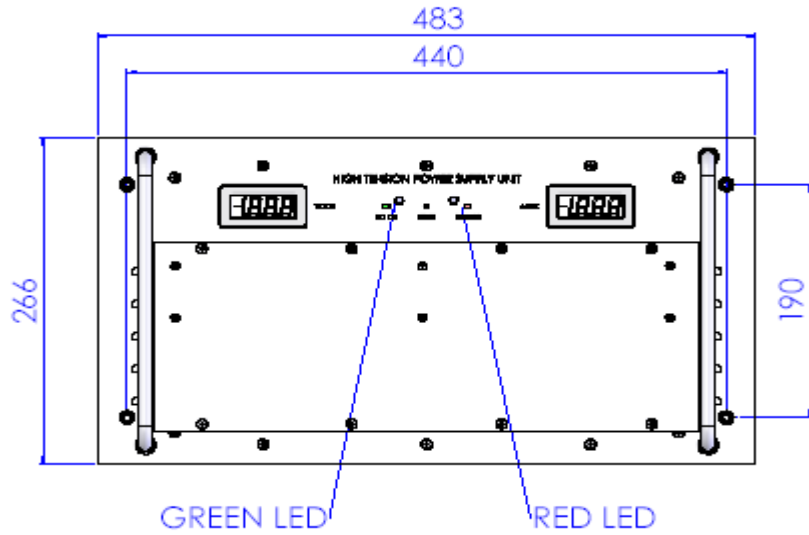
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Pins Assignment connector PLC30M10140

Pin #	Signal Name	Remarks
1	415VAC	PHASE -R
2	NOT CONNECTED	NOT CONNECTED
3	+Vout	+70V
4	+Vout	+70V
5	+Vout	+70V
6	+Vout	+70V
7	+Vout	+70V
8	+Vout	+70V
9	+Vout	+70V
10	+Vout	+70V
11	415VAC	PHASE -Y
12	NOT CONNECTED	NOT CONNECTED
13	NOT CONNECTED	NOT CONNECTED
14	NOT CONNECTED	NOT CONNECTED
15	NOT CONNECTED	NOT CONNECTED
16	+Iout	10mV/1A (Shunt)
17	-Iout	10mV/1A (Shunt)
18	+Vout	+70V
19	-Vout	Vout _ GND
20	Chassis	CHASSIS GND
21	415VAC	PHASE -B
22	NOT CONNECTED	NOT CONNECTED
23	-Vout	Vout _ GND
24	-Vout	Vout _ GND
25	-Vout	Vout _ GND
26	-Vout	Vout _ GND
27	-Vout	Vout _ GND
28	-Vout	Vout _ GND
29	-Vout	Vout _ GND
30	-Vout	Vout _ GND

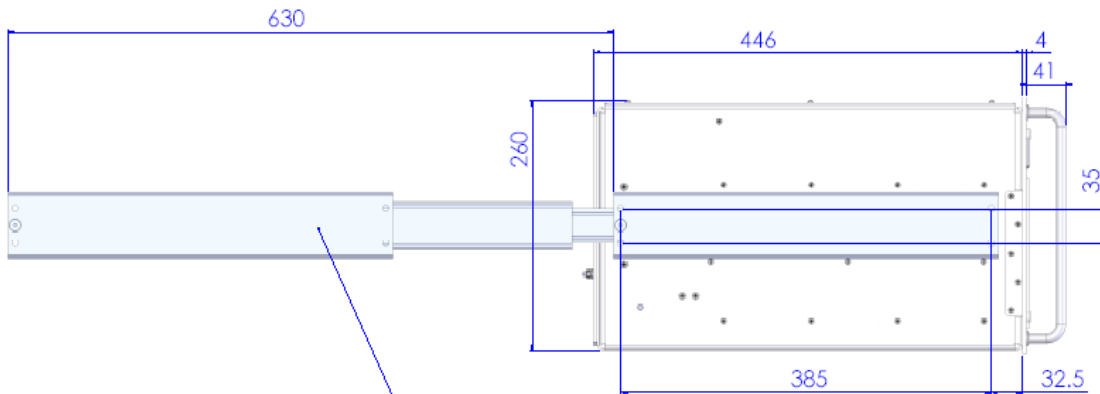
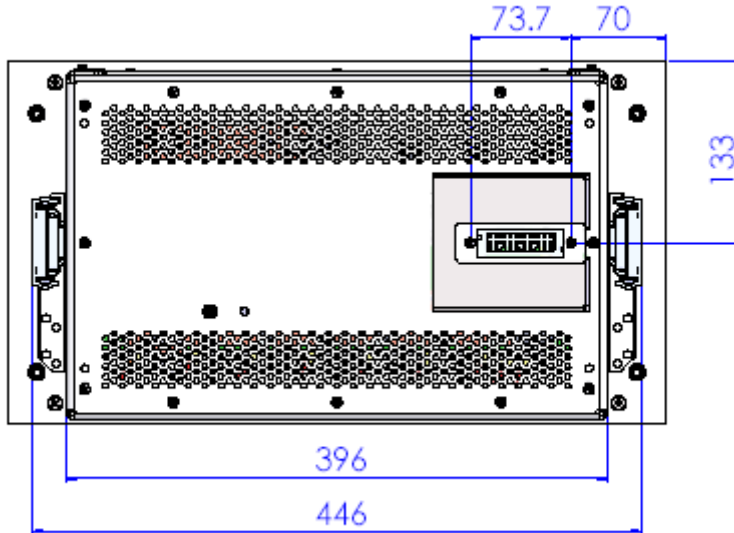
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Power Box Outline Drawing



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REAR VIEW



2 X TELESCOPING RAILS
 TYPE: CHAMBERLAN, No.: RA554V-0400

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